

# Smart Distributed System (SDS) I/O

## Smart Distributed System Module

F2-SDS-1 <---->



### Overview

If you are already using or planning to implement an SDS™ controller network, using the F2-SDS-1 module and I/O sub-system can help reduce the cost of your overall application. The Smart Distributed System™ (SDS) provides a means to connect automation equipment and devices on a single network, which eliminates expensive hardwiring. This standard communication media and software provides a low-cost method for controllers and devices to communicate low-level data at high speeds. The SDS standard provides specifications for information exchange between nodes, as well as device-level diagnostics not normally found in other I/O systems. The F2-SDS-1 module allows the well-proven micro-modular DL205 I/O system to be controlled by your SDS master controller.

### How it works

The F2-SDS-1 module plugs into the CPU slot of any DL205 I/O base. The module maintains a database with all identification data, diagnostic information, and parameters that are configured within the base and control the operation of the SDS slave module and the I/O. The F2-SDS-1 slave will monitor and report discrete and analog I/O module data to an SDS Master. All AC externally powered DL205 I/O base units contain a 24 VDC, 0.3A power supply for simple wiring of sensors and actuators into the DL205 I/O modules, and for controlling them with an

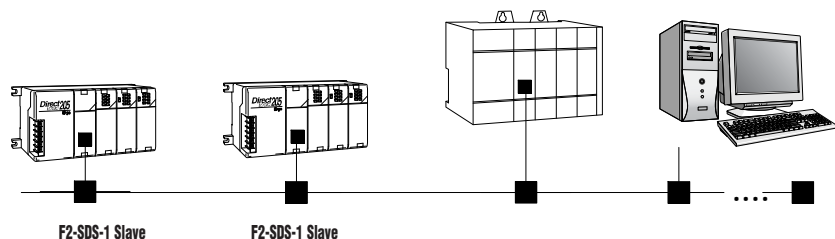
SDS Master. The F2-SDS-1 module supports all DL205 discrete and analog I/O modules. The SDS also offers:

- **Cost effectiveness:** SDS offers inexpensive controller and industrial DL205 I/O sub-system.
- **Easy connectivity:** SDS is a low-cost wiring system that's easy to implement and maintain.
- **Innovative technology:** Power is integrated into the device.
- **Diagnostics:** SDS offers advanced error diagnostics not commonly found in traditional systems.
- **High baud rates:** Baud rate brings response time down to 0.10ms per device.
- **LED indicators:** Provides indication of DL205 Smart Distributed System.

### F2-SDS-1 Interface Specifications

<b>Module Type</b>	CPU device
<b>Module Location</b>	CPU slot of any DL205 base
<b>Number of I/O</b>	Defined by number of slots per base
<b>Maximum Field Devices per Bus</b>	126 (see table next page)
<b>Max SDS Addresses per CPU</b>	8 discrete, 64 analog
<b>Communication to Field Devices</b>	Standard 4-wire shielded cable to cabinet connector, molded 4-wire cable @ up to 1Mbps to field devices.
<b>Module Connector</b>	5-position removable terminal (European style)
<b>Operating Environment</b>	0°C to 60°C (32°F to 140°F), 5% to 95% humidity (non-condensing)
<b>Internal Power Consumption</b>	160 mA @ 5VDC
<b>Manufacturer</b>	FACTS Engineering

### Connect our micro-modular DL205 I/O...



...with your PLC or PC-based SDS master.

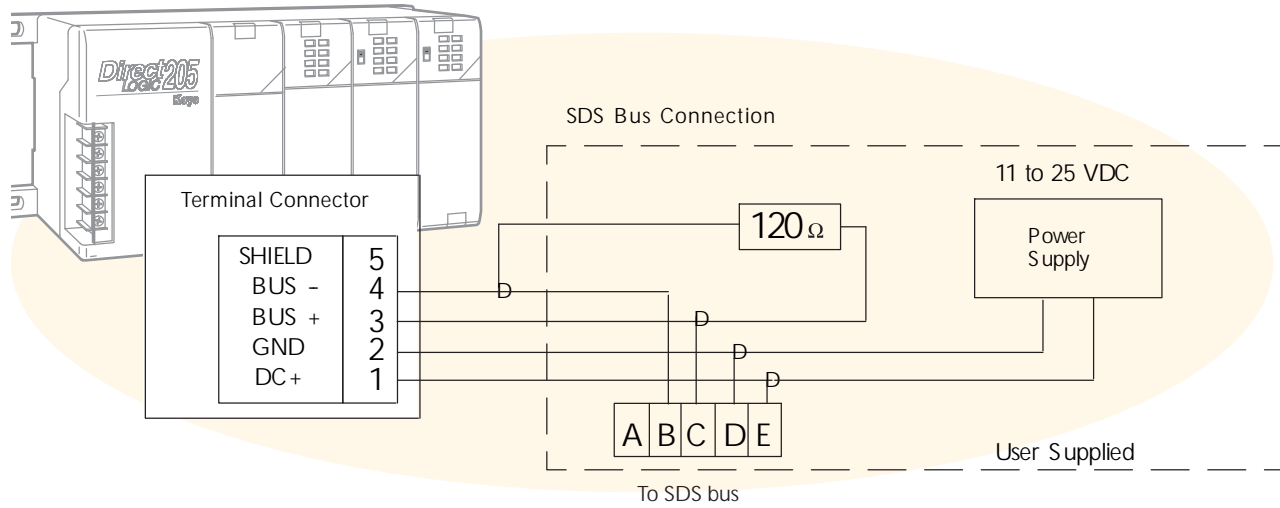
Ask for our D2-INST-M Installation and I/O Manual for complete information about DL205 I/O modules, power budgeting, and installation and wiring. This catalog does not cover CPU-slot controllers.

# SDS I/O

## I/O base and network considerations

All discrete (except 32-pt.) and analog I/O modules are supported by the F2-SDS-1 slave module. Specialty modules are not supported by the F2-SDS-1 module.

DL205 Style of I/O Modules Supported	
Discrete Types	Analog Types
4-point Input	4-channel Input
8-point Input	8-channel Input
16-point Input	2-channel Output
4-point Output	4-channel In/ 2 channel Output
8-point Output	4-channel Temperature
16-point Output (includes 12 pt)	
4-point Input/4 point Output	



Trunk Length		Baud Rate	Branch Length		Devices
Feet	Meters	Bits/sec	Feet	Meters	
75	22.8	1M	1	0.3	64
300	91.4	500K	3	0.9	126
600	182.8	250K	6	1.8	126
1,500	457.2	125K	12	3.6	126

**Other SDS specifications, compatible products, and latest SDS literature information are made available through:**  
**Honeywell MICRO SWITCH Division**  
 Internet: <http://www.honeywell.com>  
 e-mail: [info@micro.honeywell.com](mailto:info@micro.honeywell.com)  
**Comments to:**  
**SDS Council, IL50/B4-523**  
**Honeywell Micro Switch Division**  
**11 West Spring Street**  
**Freeport, IL 61032**  
**Phone: (800)537-6945 • Fax: (815) 235-5623**

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- DL05/06 PLC
- DL105 PLC
- DL205 PLC**
- DL305 PLC
- DL405 PLC
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- C-more HMIs
- Other HMI
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- Motors
- Steppers/Servos
- Motor Controls
- Proximity Sensors
- Photo Sensors
- Limit Switches
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